SUBMINIATURE A.F. VOLTAGE AMPLIFYING PENTODE

DF66

Subminiature voltage amplifying pentode suitable for use in hearing-aids. It has a filament current of 15 mA and is primarily intended for use with an H.T. battery supply of 22.5 volts.

FILAMENT

V_f	0.625	V
I_f	15	mA

MOUNTING POSITION

Any.

Note—Direct soldered connections to the leads of this valve must be at least 5 mm. from the seal and any bending of the valve leads must be at least 1.5 mm. from the seal.

CAPACITANCES (measured without external screen)

C_{a-gl}	0.15	μμF
C_{in}	1.6	μμF
C_{out}	2.2	μμF

CHARACTERISTICS

V_a	22.5	V
V_{g2}	22.5	V
I_a	50	μA
I_{g2}	15	μA
V_{g1}	−1.05	V
g_m	100	μA/V
r_a	>2	MΩ
μ_{g1-g2}	11.5	

OPERATING CONDITIONS AS RESISTANCE COUPLED A.F. AMPLIFIER *(see circuit overleaf)*

(*a*) With fixed bias

V_b	22.5	V
R_a	1.0	MΩ
R_{g2}	2.0	MΩ
V_{g1}	−0.625	V
I_k	16	μA
V_{out}/V_{in}	33	
R_{out}	5	MΩ

(*b*) With grid current biasing

V_b	22.5	V
R_a	1.0	MΩ
R_{g2}	2.7	MΩ
R_{g1}	10	MΩ
Z_s	0	
I_k	16	μA
V_{out}/V_{in}	35	
R_{out}	5	MΩ

LIMITING VALUES

V_a max.	45	V
V_{g2} max.	45	V
I_k max.	100	μA

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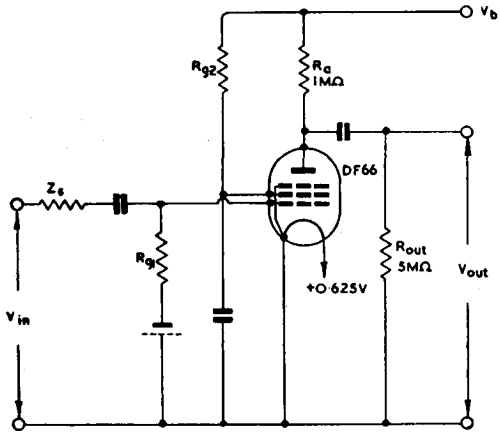

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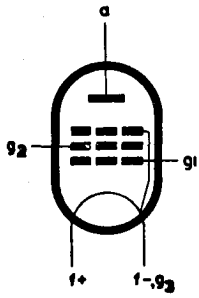
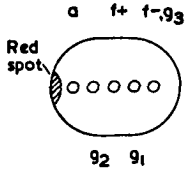
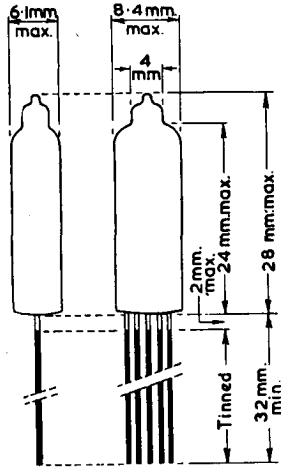
Circuit of DF66 as Resistance Coupled A.F. Amplifier





B5A BASE

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